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DATE MAILED: 10/21/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/509,535	08/07/2000	KRZYSZTOF D. MALOWANIEC		1566
7590 10/21/2004			EXAMINER	
FELIX J D'AMBROSIO			NORDMEYER, PATRICIA L	
JONES TULLA	AR & COOPER			
PO BOX 2266			ART UNIT	PAPER NUMBER
EADS STATION			1772	
ARI INGTON	VA 22202			

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/509,535	MALOWANIEC ET AL.				
Office Action Summary	Examiner	Art Unit				
	Patricia L. Nordmeyer	1772				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on <u>17 February 2004</u> .						
1	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>22-47</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>22-47</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary (
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 	Paper No(s)/Mail Dat 5) Notice of Informal Pa					
Paper No(s)/Mail Date 6) Other:						

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 17, 2004 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 22, 26 37, 40 41, 44 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Tapp (USPN 5, 169,712).

Tapp discloses a composite material formed with microporous film and at least one layer of a non-woven web of stable fibers (Column 2, lines 46-55), wherein layer comprised of fibers have diameters not greater than 10 microns (Column 18, lines 6-9). The film layer is placed on one side of a fiber layers to form a disposable hygiene article such as a diaper (Column 29, lines 1-9 and Column 26, line 64 to Column 27, line 18). Different types of materials can be

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used in combination with the film layer including a meltblown fabric that are deposited on a collecting surface (Column 18, lines 1-18). The layers are thermobonded together, forming the three layer composite (Column 26, lines 64 to Column 27, line 18), which inherently causes the third layer to penetrate the surface structure of the first layer and reducing the mean spacing between the third layer and the film layer. An overall weight per unit surface area of the composite is 30 to 200 g/m² (Column 27, lines 11-14), wherein the weight of the third layer is 5 to 70 g/m² (Column 17, lines 66-68) and the weight of the first layer is 10 to 30 g/m² (Column 17, lines 41-44). The film layer contains micropores with diameters of 0.2 to $20 \,\mu m$ in a film layer (Column 11, lines 35-40) with a thickness of between 5 and $1000 \,\mu m$ (Column 16, lines 38-42) that allows the transfer of water vapor while being impermeable to liquid (Column 27, lines 43-47). Since Tapp discloses the composite material with the diameters of the individual fibers, the weight per surface area of the fibers and the film layer with micropores of a certain diameter, it would be inherent that the composite would have a tear strength of at least $15 \, N/25 \, mm$.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 23 25, 38, 39, 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tapp in view of Braun et al. (USPN 4,828,556).

Tapp discloses the claimed composite material above except for the second film layer being breathable but liquid proof and the second film layer being permeable to water vapor through the process of chemisorption.

Braun et al. discloses a nonporous poly(vinyl alcohol) film that transports water molecules through the film layer by means of solubility (Column 10, lines 36 - 51) in a breathable, multi-layered barrier (Column 7, lines 20 - 21) with a fiber layer that is used for an outer cover in absorbent articles (Column 1, lines 37 - 45) for the purpose of removing moisture away from the surface of the skin of the user to avoid diaper rash and giving the article aesthetic qualities (Column 1, line 59 to Column 2, line 2).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the nonporous film of poly(vinyl alcohol) in Tapp in order to remove moisture away from the surface of the skin of the user to avoid diaper rash and giving the article aesthetic qualities as taught by Braun et al.

Regarding claims 23 - 25, Tapp discloses the microfiber layer, the third or outside layer, to be made of fibers with diameters less than 10 μm . Therefore, one of ordinary skill in the art through routine experimentation could determine the diameter of the fiber which gives the retention or adhesion force of the hook material. The diameter of the microfibers is deemed to be a cause effective variable with regard to the retention or adhesion force of the hook material

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to the outside of the composite material. It would have been obvious to one having ordinary skill in the art to have determined the optimum value of a cause effective variable such as diameter of the microfibers through routine experimentation in the absence of a showing of criticality in the claimed microfiber diameter. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Tapp, as modified with Braun et al., discloses the claimed invention except for the microfiber being disposed on the outside of the backing sheet. It would have been obvious to one having ordinary skill in the art at the time the invention was made to place the microfiber on the outside of the backing sheet to give the outside of the article a soft feel, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Response to Arguments

6. Applicant's arguments filed February 17, 2004 have been fully considered but they are not persuasive.

In response to Applicant's argument that Tapp fails to disclose three layers, Tapp clearly discloses a composite material made from three layers of material, a film layer and two fiber layers, to form a diaper (Column 26, line 64 to Column 27, line 9). Even though Tapp also discloses other embodiments of a composite material made with two layers of material, Tapp still

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anticipates the invention of a composite material with three layers as disclosed in the patent.

MPEP 2131.02.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Patricia L. Nordmeyer whose telephone number is (571) 272-

1496. The examiner can normally be reached on Mon.-Thurs. from 7:00-4:30 & alternate

Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Harold Y. Pyon can be reached on (571) 272-1498. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patricia L. Nordmeyer

Examiner

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SUPERVISORY PATENT EXAMINER

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